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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,884	04/12/2001	Fumio Suzuki	180640	4584

7590 05/23/2003

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EXAMINER	
LUK, LAWRENCE W	
ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/833,884	Applicant(s) SUZUKI ET AL.
	Examiner Lawrence Luk	Art Unit 2838

-- The MAILING DATE of this communication appears on the c ver sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-95 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 86-92 and 95 is/are allowed.

6)☒ Claim(s) 1-10,12,13,15-20,23-25,28,33,41,62,63 and 70-85 is/are rejected.

7)☒ Claim(s) 11,14,21,22,26,27,29-32,34-40,42-61,64-69,93 and 94 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 12 April 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claims 70-85 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These method claims do not further limit the apparatus or system claims from claim 53. The secondary cell charging method merely describes the process that is inherently undergone with the usage of the apparatus or system. Note *Ex parte Porter*, 25 USPQ2d 1144 (Bd. Pat. App & Inter. 1992) for situation where a method claim is considered to be properly dependent upon a parent apparatus claim and should not be objected to or rejected under 35 U.S.C. 112, fourth paragraph. Accordingly the claims 70-85 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda (6,211,649).

In regard to claim 1, Matsuda shows a secondary cell charging apparatus, which uses a computer apparatus as a part of construction elements of the charging apparatus (refer to col. 1, line 65 to col.2, line 4).

In regard to claim 8, Matsuda shows a controlling-condition-inputting means consisting of either a key-board or a mouse of a PC, at lease one of information selected from a group of charging processing information, charging processing condition, information of a battery to be charged, situation of charging process proceeding, charging history or the like is selected so as to make a control based upon the selected information and the result thereof being displayed on said display means of said PC (refer to col.1, line 31 and col.1, lines 40-44).

In regard to claim 9, Matsuda shows charging processing operation program is made separately based upon kinds of batteries, models thereof or applications thereof, respectively (refer to col.9, lines 2-10).

4. Claims 62 and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Pan (6,542,092).

In regard to claim 62, Pan shows a secondary cell charging method wherein a charger to which is connected either a holder part configured so as to enable acceptance and a charging processing operation separately on one or a plurality of secondary cells of various sizes requiring charging processing, or a stand part configured so as to enable acceptance and a charging processing operation of a cell package in that a plurality of secondary cell of the same size packaged within a prescribed pack, or directly of a cellular telephone with said pack built thereinto, is either

built into a PC or connected externally thereto, whereby an internal power supply circuit of the PC 's used as a power supply in a charging operation. (refer to Fig.1 and col. 1, line 50-53).

In regard to claim 63, Pan shows the charger connected to said: internal power supply circuit of said PC s connected to a signal output terminal of said PC or is connected to said signal output terminal being either directly or indirectly, via an appropriate connector and/or cable, so that a charging processing operation on a secondary cell is performed (refer to col.1, lines 1-9).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 3,10,12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482).

In regard to claim 2, Matsuda discloses a secondary cell using an internal power supply circuit of a PC as a power supply required for a charging operation (refer to col.1, line 65 to col.2, line 4), but fails to teach a computer apparatus comprising a charger.

Toyosato shows a computer apparatus comprising a charger (refer to col.7, lines 30-31).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda to include a computer

apparatus comprising a charger as taught by Toyosato for the purpose of improving the utility of the charger.

In regard to claim 3, Toyosato shows the PC is selected from a group of a general-purpose PC including a desktop PC, a laptop PC, a mobile type PC (refer to col.3, line 10 and col.4, lines 25-35).

In regard to claim 10, Toyosato shows an apparatus that forms the charger which is selected from a group consisting of an international PCI (PC interface) standard selecting from either one of a PCI board or PCI card each including said charging processing operation program therein, an IC chip mounted on an expansion board or the like, a CD-ROM, a floppy disk, an IC card each including said charging processing operation program therein and a PC hard disk (HD) onto which said charging processing operation program has been installed (refer to col.3, lines 52-53 and col.6, lines 11-23).

In regard to claim 12, Matsuda shows a charger is connected to said power supply circuit of said PC through an internationally standardized interface such as a PC or a USB of said PC (refer to col.2, lines 55-60).

In regard to claim 16, Toyosato shows international PCI (PC interface) standard selecting from either one of a PCI board or PCI card, each including said charging processing operation program therein, an IC chip mounted on an expansion board or the like, a CD-ROM, a floppy disk, an IC card each including said charging processing operation program therein or a PC hard disk (HD) onto which said charging processing operation program has been installed, is individually produced based upon kinds of

batteries, model thereof, applications therefor, or the like, respectively (refer to col.6,lines 11-23 and col.7, lines 8-11).

7. Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482), as discussed above, and further in combination with Brotto et al. (6,218,806).

In regard to claim 4, Matsuda and Toyosata discloses the elements as claimed, except for a charger that is either a charging processing operation program required for a charging operation on a secondary cell or is an apparatus into which a charging processing operation program required for a charging operation to a secondary cell is built.

Brotto et al. shows a charger is either a charging processing operation program required for a charging operation on a secondary cell or is an apparatus into which a charging processing operation program required for a charging operation to a secondary cell is built (refer to col.2, lines 46-58).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda and Toyosato to include a charging operation on a secondary cell or is an apparatus into which a charging processing operation program required for a charging operation to a secondary cell is built as taught by Brotto et al. for the purpose of providing current to the battery.

In regard to claim 5, Brotto et al. shows a charger provided within said PC or provided external thereto (refer to col.col.3, lines 23-27).

In regard to claim 7, Brotto et al. shows a PC is provided with a driving controlling

program for driving a charging controlling program installed in said charger (refer to col.2, lines 51-52).

8. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482), as discussed above, and further in combination with Nelson et al. (5,592,528).

In regard to claim 6, Matsuda and Toyosata discloses the elements as claimed, except for a charger is connected to a battery holding apparatus, which holds at least a secondary cell requiring charging processing.

Nelson et al. shows a charger connected to a battery holding apparatus, which holds at least a secondary cell requiring charging processing (refer to col.1, lines 22-28).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda and Toyosato to include a charger connected to a battery holding apparatus, which holds at least a secondary cell requiring charging processing as taught by Nelson et al. for the purpose of improving the utility of the charger.

In regard to claim 13, Nelson shows a battery holding apparatus connected to said charger provided with a chip into which said charging processing operation program being installed therein and mounted on a board which is inserted into a board insertion slit of said PC, through an appropriate connector and/or cable (refer to col.7, lines 38-45).

9. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482), Nelson et al. (5,592,528) as discussed above, and further in combination with Anderson (5,982,147).

In regard to claim 15, Matsuda, Toyosato and Nelson et al. discloses the elements as claimed, except for a charger provided outside of said PC, said charger is connected to said internal power supply circuit of said PC through said board inserted into said board insertion slit or through said USB connector provided with said PC.

Anderson shows a charger is provided outside of said PC, said charger is connected to said internal power supply circuit of said PC through said board inserted into said board insertion slit or through said USB connector provided with said PC (refer to col.4, lines 37-47).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda, Toyosato and Nelson et al. to include a charger provided outside of said PC, said charger is connected to said internal power supply circuit of said PC through said board inserted into said board insertion slit or through said USB connector provided with said PC as taught by Anderson for the purpose of improving a system for electrically coupling a computer.

In regard to claim 17, Anderson shows battery holding apparatus includes a holder part configured so as to enable acceptance and a charging processing operation separately on one or a plurality of secondary cell of various sizes requiring charging processing (refer to col.4,lines 37-47 and lines 61-63).

10. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482), Nelson et al. (5,592,528) and Anderson (5,982,147) as discussed above, and further in combination with Braitberg et al. (5,822,427).

In regard to claim 18, Matsuda, Toyosato, Nelson et al. and Anderson discloses the elements as claimed, except the battery holding apparatus includes a stand part configured so as to enable acceptance and a charging processing operation of a cell package in which a plurality of secondary cell of the same size being packaged therewithin, or directly of a cellular telephone with said pack built thereinto, directly.

Braitberg et al. shows the battery holding apparatus includes a stand part configured so as to enable acceptance and a charging processing operation of a cell package in which a plurality of secondary cell of the same size being packaged therewithin, or directly of a cellular telephone with said pack built thereinto, directly

(refer to col.15, lines 27-36).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda, Toyosato, Nelson et al. and Anderson to include the battery holding apparatus includes a stand part configured so as to enable acceptance and a charging processing operation of a cell package in which a plurality of secondary cell of the same size being packaged therewithin, or directly of a cellular telephone with said pack built thereintoas taught by Braitberg et al. for the purpose of providing a univeral interface with hand held celluler phone.

In regard to claim 19 and 20, Braitberg et al. shows the secondary cell holder part or stand part thereof is formed so as to match the dimensions or shape of each individual secondary cell, and the secondary cell holder part or stand part is formed so as to match the dimensions or shape of all said secondary cells(refer to col.5, lines 31-41).

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482), as discussed above, and further in combination with Murakawa (6,249,607).

In regard to claim 23, Matsuda and Toyosata discloses the elements as claimed, except for the charging processing operation program included in the charger is either built into said PC by inserting a floppy disk, CD-ROM, or an IC card containing said charging processing operation program into a prescribed location of said PC, or by inserting a PCI board onto which an IC chip containing said charging processing operation program has been mounted into an expansion slot of said PC.

Murakawa shows a charger is either a charging processing operation program required for a charging operation on a secondary cell or is an apparatus into which a charging processing operation program required for a charging operation to a secondary cell is built (refer to col.5, lines 30-37).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda and Toyosato to include a charger is either a charging processing operation program required for a charging operation on a secondary cell or is an apparatus into which a charging processing

operation program required for a charging operation to a secondary cell is built as taught by Murakawa the purpose of providing a computer program product in a memory for executing image processing.

12. Claims 24, 25 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482) and Murakawa (6,249,607), as discussed above, and further in combination with Singleton (6,501,949).

In regard to claim 24, Matsuda, Toyosata and Murakawa discloses the elements as claimed, except for each of said charging processing operation program is created so as to have a respective charging process operation condition of a secondary cell to be subjected to charging processing, being different from each other based upon at least one factor among a secondary cell manufacturer name, secondary cell type, model, construction, quantity, battery capacity, and internal resistance and the like .

Singleton shows each of said charging processing operation program is created so as to have a respective charging process operation condition of a secondary cell to be subjected to charging processing, being different from each other based upon at least one factor among a secondary cell manufacturer name, secondary cell type, model, construction, quantity, battery capacity, and internal resistance and the like . (refer to col.2, lines 6-9 and col.4, lines 39-42).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda,Toyosato and Murakawa to include each of said charging processing operation program created so as to have a respective charging process operation condition of a secondary cell to be subjected to

charging processing, being different from each other based upon at least one factor among a secondary cell manufacturer name, secondary cell type, model, construction, quantity, battery capacity, and internal resistance and the like as taught by Singleton the purpose of improving current status information about the power source.

In regard to claim 25, Singleton shows the charging processing operation program has a function to distinguish at least one information selected from a group of information consisting a manufacturer name, secondary cell type, model, construction, quantity, battery capacity, and internal (refer to col.4, lines 39-42 and col.5, lines 1-10).

In regard to claim 33, Singleton shows a display means of said PC displays at least one information selected from a manufacturer name, a battery type, battery capacity, charging rate, and internal resistance and the like with regard to charging operation conditions for said selected secondary cell requiring charging processing, and displays information in that whether it distinguishes the start of charging or charging in progress (refer to col.5, lines 1-10).

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (6,211,649) in combination with Toyosato (6,532,482),Murakawa (6,249,607) and Singleton (6,501,949), as discussed above, and further in combination with Anderson (6,078,871).

In regard to claim 28, Matsuda, Toyosata, Murakawa and Singleton discloses the elements as claimed, except for a user uses an appropriate input means associated with said PC to input information regarding a secondary cell requiring charging processing inserted in said battery holding apparatus, said information being displayed

on a display means of said PC.

Anderson shows a user uses an appropriate input means associated with said PC to input information regarding a secondary cell requiring charging processing inserted in said battery holding apparatus, said information being displayed on a display means of said PC (refer to abstract).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Matsuda,Toyosato, Murakawa and Singleton to include a user that uses an appropriate input means associated with said PC to input information regarding a secondary cell requiring charging processing inserted in said battery holding apparatus, said information being displayed on a display means of said PC as taught by Anderson for the purpose of displaying a status condition of a smart battery.

14. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuoka et al. (6,465,984) in combination with Kerai et al. (6,531,845).

In regard to claim 41, Fukuoka et al. discloses a PC comprising an internal power supply circuit, a charger with a built-in charging processing operation program using said internal power supply circuit of said PC as a power supply in a charging operation (refer to Fig.2 and col.5, line 46 -55), but fails to teach a display means connected to said PC, an input means connected to said PC, a controller for causing said PC to drive, and an external power supply means for driving said PC.

Kerai et al. shows a display means connected to said PC, an input means connected to said PC, a controller for causing said PC to drive, and an external power supply means for driving said PC (refer to col.4, lines 13-15 and col.6, lines 52-67).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the device of Fukuoka et al. to include display means connected to said PC, input means connected to said PC, a controller for causing said PC to drive, and an external power supply means for driving said PC as taught by Kerai et al. for the purpose of charging a battery powered device containing a communications port.

Allowable Subject Matter

15. Claims 86-92 and 95 are allowed

Claim 86 is allowable. The reason for allowance is that the prior art of record fails to teach or reasonably suggest a method for charging a secondary cell in a charging system, a step of storing said battery list into a prescribed storage means of said PC, a step of starting software, including said charging processing operation program, a step of inserting a secondary cell requiring charging processing into a holding means of said charger, a step of said charging processing operation program distinguishing information with regard to said secondary cell requiring a charging operation inserted in said charger, selecting from said battery list a charging processing operation program suitable for a charging operation of said secondary cell, and of displaying said selected charging processing operation program on said display means, together with a charging graph or other battery information, a step of inputting a number of secondary cells to be

charged simultaneously, a step of verifying charging conditions on a screen of said display means, and then starting a charging operation, a step during a charging processing operation of either causing drive of an alarm means, which makes notification that a charging processing operation is in progress, or causing a dynamic display of a charging graph on said display means, and a step, in a case in which said charging processing operation on said secondary cell is completed, of performing a display indicating that said charging processing operation has been completed.

Claim 92 is allowed due to its dependency on claim 86.

Claim 87 is allowable. The reason for allowance is that the prior art of record fails to teach or reasonably suggest a method for charging a secondary cell in a charging system, a step of storing said battery list into a prescribed storage means of said PC, a step of starting software, including said charging processing operation program, a step of inserting a secondary cell requiring charging processing into a holding means of said charger, a step of, in accordance with information with regard to a secondary cell requiring charging processing, selecting a charging processing operation program suitable for a secondary cell requiring a charging processing operation from said battery list, a step of displaying a charging graph, a step of inputting a number of secondary cells to be charged simultaneously, a step of verifying charging conditions on a screen of the display means, and then starting a charging operation, a step during a charging processing operation of either causing drive of an alarm means, which makes notification that a charging processing operation is in progress, or causing a dynamic display of a charging graph on said display means, and a step in a case in which said

charging processing operation on said secondary cell is completed of performing a display indicatiog that said charging processing operation has been completed.

Claim 88 is allowable. The reason for allowance is that the prior art of record fails to teach or reasonably suggest a method for charging a secondary cell in a charging system, a step of storing said battery list into a prescribed storage means of said PC, a step of starting software, including said charging processing operation program, a step of inserting a secondary cell requiring charging processing into a holding means of said charger, a step of a user using said input means to input separately to said PC at least a part of a battery manufacturer name, battery type, battery voltage, battery capacity, charging rate, and internal resistance and the like for a secondary cell requiring charging processing, a step of said PC selecting from said battery list, based on said input information, a charging processing operation program suitable for said secondary cell requiring a charging processing operation, a step of displaying a charging graph, a step of inputting a number of secondary cells to be charged simultaneously, a step of verifying charging conditions on a screen of said display means, and then starting a charging operation, a step during a charging processing operation of either causing drive of an alarm means, which makes notification that a charging processing operation is in progress, or causing a dynamic display of a charging graph on said display means, and a step, in a case in which said charging processing operation on said secondary cell is completed, of performing a display indicating that said charging processing operation has been completed.

Claims 89-91 are allowed due to their dependency on claim 88.

Claim 95 is allowable. The reason for allowance is that the prior art of record fails to teach or reasonably suggest a method for charging a secondary cell in a charging system, a step of creating a charging processing operation program used for each one of various kinds of secondary cell batteries to be charged, respectively, storing said charging processing operation program created for each one of various kinds of secondary cell batteries to be charged, respectively, into a predetermined memory medium, opening said charging processing operation program to the public through an communication net works or by printing out same on a hard storing medium, preperaring said charging processing operation program suitable for an user's intention, when said user having a PC had accessed to this system, asking said user to play a predetermined necessary expenses through a predetermined payment system by a business entity providing said system to the public, providing said charging processing operation program to said user by distributing system or through said communication net works, when said business entity had confirmed that said user had said predetermined expenses through said predetermined payment system.

16. Claims 11, 14, 21, 22, 26, 27,29-32, 34-40, 42-61,64-69 and 93, 94 are objected to as being dependent upon a rejected base claim. The prior art of record fails to teach or reasonably suggest that: Claim 11, a charger is connected detachably to any one of output terminals of said internal power supply circuit of said PC, and is further connected either directly or indirectly, by an appropriate connector and/or cable to said battery holding apparatus; Claims 14, a case in which said charger is provided within said PC, said charger is connected to said internal power supply circuit of said PC, and

is connected to said battery holding apparatus either directly via a signal output of said PC, or indirectly connected thereto, via a signal output of said PC, utilizing an appropriate connector and/or cable; Claims 21 and 22, a secondary cell charging processing operation program executes high-speed charging processing; Claims 26, 27 and 29, a charger automatically selects a charging processing operation program having the most suitable charging processing condition to said secondary cell battery to be charged, among a plurality of charging processing operation program stored in said charger utilizing information about the secondary cell battery to be charged and distinguished by sai PC, its-self or separate information about the secondary cell battery to be charged which is input into said PC by user utilizing said inputting means; Claim 30, a user based on information regarding a secondary cell requiring charging processing, sets various conditions necessary to be required for charging said secondary cell by selecting same from a large number of alternatives displayed on a display screen of said PC; Claims 31 and 32, a predicted charging characteristics graph with regard to charging operation conditions for said selected secondary cell requiring charging processing can be displayed on said display means of said PC; Claims 34-40, a display means of said PC displays at least one information selected from a manufacturer name, a battery type, battery capacity, charging rate, and internal resistance and the like with regard to charging operation conditions for said selected secondary cell requiring charging processing, and separately displays either one of the start of charging or charging in progress and wherein said display means displays either a separate display of a battery voltage and battery temperature, which vary with the

elapse of processing time, or a graph indicating a relationship between a battery voltage and a charging time or a relationship between a battery temperature and a charging time; Claims 42-61, a battery holding apparatus connected directly or indirectly to said charger, said battery holding apparatus includes either a holder part configured so as to enable acceptance and a charging processing operation separately on one or a plurality of secondary cell of various sizes requiring charging processing, or a stand part configured so as to enable acceptance and a charging processing operation of a plurality of secondary cell to be charged of the same size packaged within a prescribed pack, or directly of a cellular telephone with said pack built thereinto; Claims 64-69, the secondary cell holder part or stand part is formed so as to match the dimensions or shape of each individual secondary cell; Claims 93 and 94, a charger selected from a group consisting of an international PCI (PC interface) standard selecting from either one of a PCI board or PCI card each including said charging processing operation program therein , an IC chip mounted o an expansion board or the like, a CD-ROM, a floppy disk, a IC card each including said charging processing operation program therein and a PC hard disk (HD) onto which said charging processing operation program has been installed is formed a kit with a predetermined battery holder means and a predetermined operation manual of said charger so as to be sold publicly. Claims 11, 14, 21, 22, 26, 27, 29-32, 34-40, 42-61, 64-69 and 93, 94 would be allowable if rewritten in independent from including all of the limitations of the base claim.

Conclusi n

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Luk whose telephone number is (703)305-0617. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703) 308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-7724 for regular communications and (703)305-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

LWL
May 16, 2003

Lawrence Luk
examiner
5/16/03